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10/609,114	06/27/2003	Robert Austin Porter	POR1000.02A1	9256

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EXAMINER

MOSSER, KATHLEEN MICHELE

ART UNIT	PAPER NUMBER
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3715

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/609,114	Applicant(s) PORTER, ROBERT AUSTIN	
	Examiner Kathleen Mosser	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-55 is/are pending in the application.
- 4a) Of the above claim(s) 39, 51, 53 and 55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38, 40-50, 52 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

In response to the amendment filed 01/27/2009, claims 1-37 have been cancelled; applicant has voluntarily withdrawn claims 39, 51, 53 and 55; claims 38, 40-50, 52 and 54 remain under consideration.

Claim Objections

1. Claim 54 is objected to because of the following informalities: The amendment to element b) removing "hand held" leaves the claim reading "the document while being by a user". This sentence does not read clear. It appears that the phrase "while being by a user" should also be cancelled from the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 38, 40-50, 52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US Patent No. 5,321,611) in view of Pollard et al. (US Patent Application Publication No. 2003/0025951) and further in view of Ishitani (US Patent No. 5,506,918).

Re Claim 38: Clark discloses a system comprising a data field residing on a document (Col. 3, Lines 9-13), means for digitally imaging the document (Col. 3, Lines 9-10), analyzing a digital image to obtain a digital representation of the user response data contained in a region of interest (Col. 3, Lines 13-17), means for generating a numerical score or letter grade from the digital representation of the user

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response data (Col. 4, Lines 24-26), and means for transferring the numerical score or letter grade to an electronic database (Col. 4, Lines 1-3; Col. 10, Lines 9-11).

However, Clark does not specifically disclose that the data field is variably positioned and angled using an image feature to identify the location of the data field, calculating coordinates of the image feature for finding the region of interest containing user response data.

Pollard et al. disclose that a data field can be variably positioned, angled, and oriented, using image features to identify the location of the data field, and calculating coordinates of the image feature containing the region of interest with user response data (Paragraphs 8-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a data field can be variably positioned, angled, and oriented, using image features to identify the location of the data field, and calculating coordinates of the image feature containing the region of interest with user response data, thereby providing a paper-to-computer interface that does not require a special orientation of the paper to process images and data on the paper.

Neither Clark nor Pollard further teaches utilizing image dithering programming logic that measures vertical and horizontal angles for said digital image feature, wherein said vertical and horizontal angles represent a rotational angle at which said image feature is rotated. However, Ishitani teaches a the use of dithering for determination of document skew (rotation), including both horizontal and vertical processing, see Fig. 10, its associated description and col. 3: 41-62. It would have been obvious to one of ordinary skill in the art to use the determination for document rotation taught by Ishitani with the systems of Clark and Pollard so as to allow for the determination of a documents skew even should the location markings of the Pollard invention be unreadable (such as through a student's doodling or extraneous marks).

Re Claim 40: Clark discloses using a digital camera (Col. 3, Lines 34-35).

Re Claims 41, 43: Regarding the limitations of identification data, grade data, input bubbles, and hand-written indicia, these limitations are related to the intended use of the printed matter of the data field

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and thus are not functionally related to the substrate/label and will not distinguish the invention from the prior art in terms of patentability.

Re Claim 42: Clark does not specifically disclose a rectangle surrounding the data field. However, Keogh et al. (USPN 5,134,669) which is incorporated in Clark by reference, discloses various data fields surrounded by rectangles (Fig. 3).

Pollard et al. disclose a rectangle surrounding the data field (Paragraph 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a rectangle surrounding the data field, thereby providing an easily identifiable image feature.

Re Claim 44: Clark discloses the system controlled by at least one microprocessor and associated programming (Fig. 2).

Re Claim 45: Clark discloses a database as discussed above.

However, Clark does not specifically disclose an electronic gradebook.

The applicant has admitted that electronic gradebook databases are a well known type of database in the art, storing grade information regarding students.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transfer the score or grade data to a grade book, thereby achieving the predictable result of keeping track and record of a student's progress.

Re Claim 46: Claim 46 includes limitations that have been discussed above with regard to claims 38, 40, 41, and 45, each discussed above.

Re Claim 47: Claim 47 includes limitations that have been discussed above with regard to claim 42 above.

Re Claim 48: Claim 48 includes limitations that have been discussed above with regard to claim 43 above.

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Re Claim 49: Claim 49 includes limitations that have been discussed above with regard to claim 44 above.

Re Claims 50, 52: Claim 50 includes several limitations already discussed above with regard to claims 38 above. Pollard et al. disclosed calculating position, orientation, size, and distortion of the image feature. McMillin (USPN 5,103,490), which is incorporated by reference into Clark, discloses using position, orientation, size, and distortion to find regions of interest containing user response data and input bubbles that are measured for darkness (Col. 8, Line 23-Col. 12, Line 42; Fig. 5; Col. 3, Lines 4-20).

Re Claim 54: Claim 54 includes limitations already discussed above with regard to claims 50 and 52 above, and additionally includes the limitation that the digital imaging means includes an image sensor, lens, associated electronics, and support structure with no moving components required for said digital imaging means. Clark discloses an image sensor, lens, associated electronics, and a support structure in the form of a scanner with a digital camera (Col. 3, Lines 34-37).

However, Clark does not specifically disclose the support structure having no moving components.

Pollard et al. disclose a means for digitally imaging a document with no moving components required (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an imaging means with no moving components, thereby achieving the predictable result of allowing the imaging means to image the entire document quickly.

Response to Arguments

The examiner would like to remind applicant that the text of the cancelled claims need not be provided in the claim listing. The inclusion of the claim number and the parenthetical "(cancelled)" is sufficient to comply with the requirements of 37 CFR 1.121.

Affidavit/declaration filed 01/27/2009

Applicant has requested consideration of the declaration under 37 CFR 1.132 originally filed 05/01/2008 a copy of which was included in the response filed 01/27/2009.

The declaration under 37 CFR 1.132 filed 01/27/2009 is insufficient to overcome the rejection of the claims based upon Clark and Pollard et al as set forth in the last Office action because: the declaration fails to provide sufficient evidence of non-obviousness, a nexus to the claimed invention, and only presents the opinion of an individual as to the non-obvious nature of the invention. The affidavit sets forth that Mr. Carey has used a product entitled "GradeCam". There are, however no correlation between the features and functions of this product and the specific features of the claimed invention. There has been no objective evidence submitted to show a contrast to other products on the market, a showing of superior functions of the instant invention, evidence of commercial success, or otherwise. Though Mr. Carey attests that in his opinion the features of the invention are non-obvious, there is no factual evidence provided to support that opinion. See MPEP 716.01(c).

Rejections under 35 USC §103(a)

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Such new grounds of rejection necessitated by the applicant's amendment to the claims so as to include dithering logic.

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The examiner previously took official notice that electronic gradebook databases are a well known type of database in the art, storing grade information regarding students. Official notice which goes unchallenged in the next office action is regarded as applicant admitted prior art. See MPEP 2144.03.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen Mosser whose telephone number is (571) 272-4435. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kathleen Mosser/
Primary Examiner, Art Unit 3715

March 9, 2010